

Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx

LITE Industrial Sidecar Sensor Kit (WIM-WH-SKIT)

Provides motion sensing, daylight dimming and wireless control for connected 0-10V luminaires (optional extension available)

Typical Applications
Industrial • Manufacturing

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- Product Warranty



- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

Product Features



Compatibility



Overview

The industrial high bay sensor is an integral part of the WaveLinx LITE system and offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting. WaveLinx industrial sensors offer installation heights up to 40 feet and have coverage patterns up to 5000 square feet (see sensor specifications - field of view). When part of the WaveLinx LITE system, the sensor operates on a wireless mesh network based on IEEE 802.15.1 standards.

The sensors offer simple tool-less integration into WaveLinx industrial light fixtures equipped with the 4-pin Zhaga Book 18 compliant socket. Once installed, sensors receive power from their co-located light fixture with no batteries to replace. The sensor in combination with the WaveLinx LITE mobile application allows you to gain considerable energy savings from occupancy and daylight sensing lighting control. The WaveLinx LITE mobile application allows you to map the sensor to any area or control zone, select occupancy or vacancy, occupied and unoccupied light levels and set the hold time.

Product Features & Benefits

- Model suitable for High bay (up to 40ft / 45ft major motion) applications
- Out of the box functionality: Occupied to Full, Unoccupied to 10%, daylighting disabled
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx LITE mobile application
- Sensor housing installs via 1/2" knockout and offers connection with standardized 0-10V drivers
- IP66 rating for warehouse and manufacturing environments

Order Information

WaveLinx LITE Industrial Sidecar High Bay Sensors are accessories to the WaveLinx LITE system which may be used with out-of-the-box functionality or commissioned via the WaveLinx LITE mobile application.

WaveLinx LITE Industrial Sidecar High Bay Sensors are used to provide occupancy and daylight dimming to spaces from the industrial light fixture. For energy code compliance, additional sensors may not be required.

WaveLinx LITE devices are not currently compatible with the WaveLinx Area Controller.

Catalog Number

Catalog #	Description
WIM-WH-SKIT	WaveLinx LITE Industrial Fixture Sidecar High Bay Sensor, White, 15 - 40ft (4.5 - 12.2m)
WLX-EXT-SKIT	WaveLinx LITE Industrial Fixture Sidecar Extension (optional - for use when sensor position needs to be lowered)
Notes For use with industrial light fixtures equipped with standard 0-10V drivers.	Notes When used as a component in the WaveLinx LITE system, design best practices (including the number of devices, installation locations, device to device spacing, etc. must strictly adhered. High mount models accommodate mounting height to 45ft (13.7m) for major motion (vehicles, fork trucks, etc.) - may not detect minor motion of people depending on conditions.

Optional Accessories

If the out-of-the-box behavior of the WaveLinx LITE Industrial Sensor does not satisfy project requirements, download and register the WaveLinx LITE mobile application from either the Google Play or Apple Store®.

This mobile application can be used to form a lighting network - creating control zones, occupancy sets, setting occupancy or vacancy modes of operation, configuring daylighting, etc.

Product Specifications

Key Features

Kit Contents:

- Sensor
- Sidecar housing
- Control module
- Easily enable 0-10V luminaires to be controlled by WaveLinx LITE
- 120-277VAC with 6 amp zero cross relay and 0-10V continuous dimming
- Suitable for installation up to 40ft (45ft major motion)
- Out-of-the-box functionality: Occupied to full, Unoccupied to 10%, daylighting disabled
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx LITE mobile application

Mechanical

Sidecar Size: 2.3" (58mm) SQ Height 2" (50mm)

Sidecar Weight: 0.35 lbs (0.16 kg)

Sensor Size: Base Diameter 3.2" (82mm) Height: 1.6" (41mm)

Sensor Weight: 0.20 lbs (0.10 kg)

Environment:

- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
- Sensor passive infrared (PIR) performance may become exceedingly sensitive below -4°F (-20°C)
- **Storage temperature:** -40°F to 158°F (-40°C to 70°C)
- **Relative humidity operating:** 0% to 95% non-condensing
- Default behavior intended for indoor use only

Mounting: Fixture mount

Mounting Height: Up to 40ft (45ft major motion)

Color: White (sensor and control module)

Housing: UV stabilized plastic

Ingress protection: IP66

Light Sensor Detector Shields: Field configured shield included

Daylighting Installation:

- Ensure that sensor is not looking directly at artificial light
- Ensure that sensor is not obstructed
- Use configurable lens mask for desired directionality

Electrical

- 120/277VAC incoming and switched power
- 20mA 0-10V sink (typical 10 drivers MAX)
- 6 amp LED loads

Software Specifications

- Any number of sensors can be mapped to any number of zones
- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app
- Mobile app configuration of Occupied and Unoccupied light levels

Wireless Specifications

Radio: 2.4GHz

Standard: IEEE 802.15.1 - Bluetooth® 4.2 Low Energy (BLE)

Transmitter Power: + 8dBm

Range: Sensor to sensor; 160ft (49m) LOS (best practice)

Standards/Ratings*

- cULus Listed - Energy Management Equipment (UL916)
- FCC Part 15/ECES-003
- RoHS
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

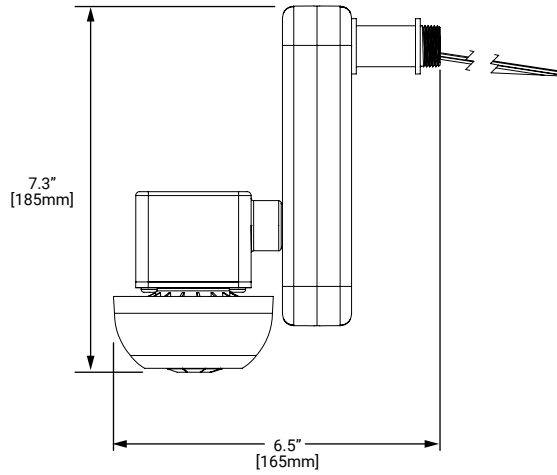
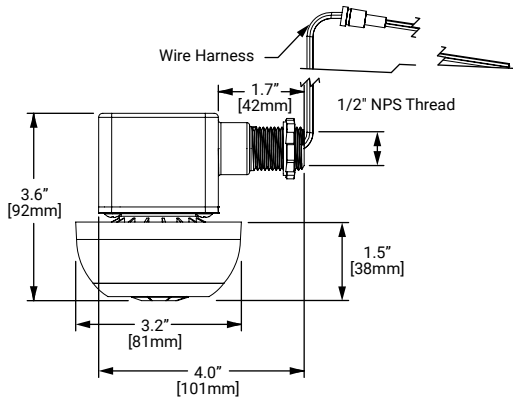
Warranty

- Five year warranty standard

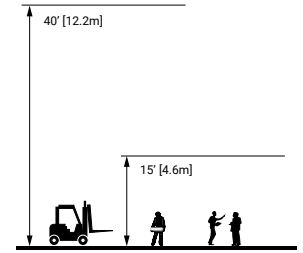


Download the WaveLinx LITE Mobile App from either the Google Play or Apple Store®

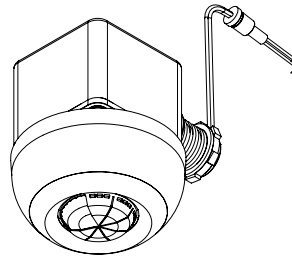
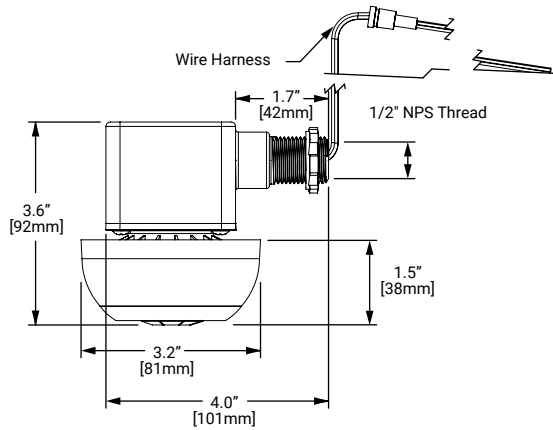
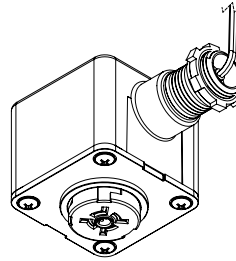
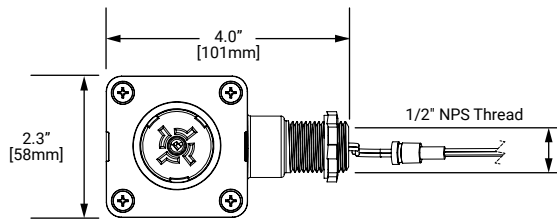
Dimensional Details



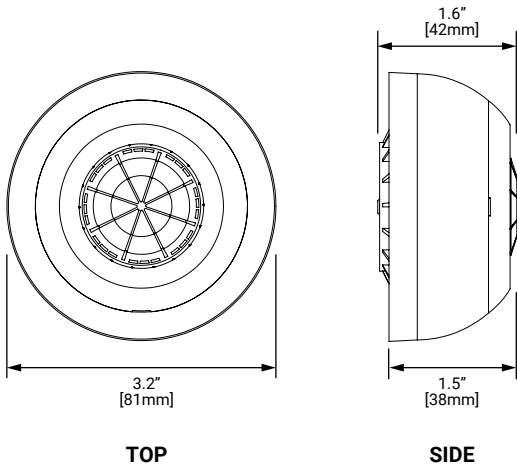
Mounting Height



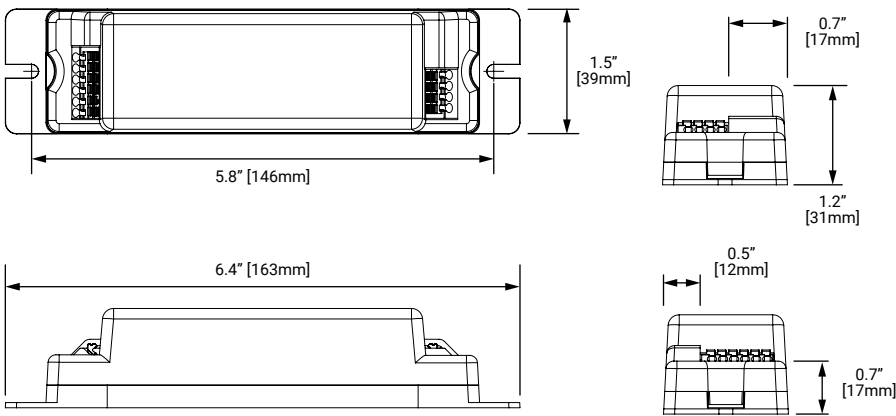
Dimensional Details - Industrial Sidecar Sensor Kit



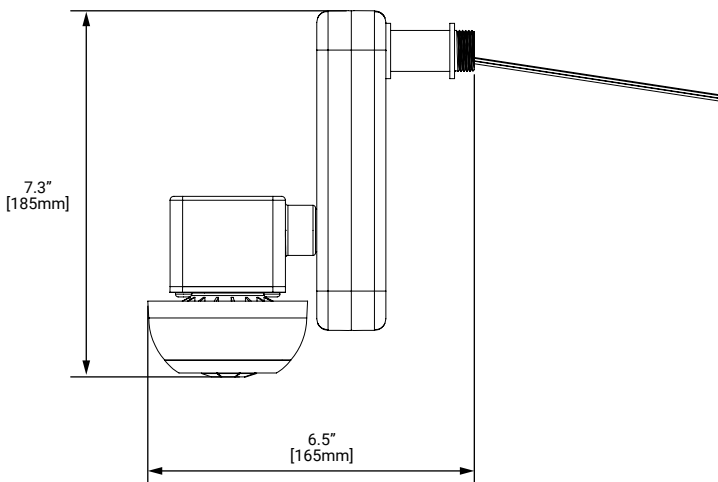
Dimensional Details - Sensor



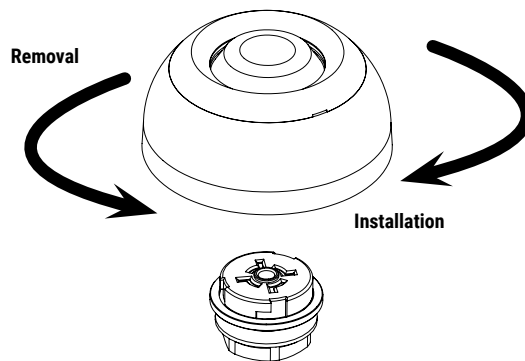
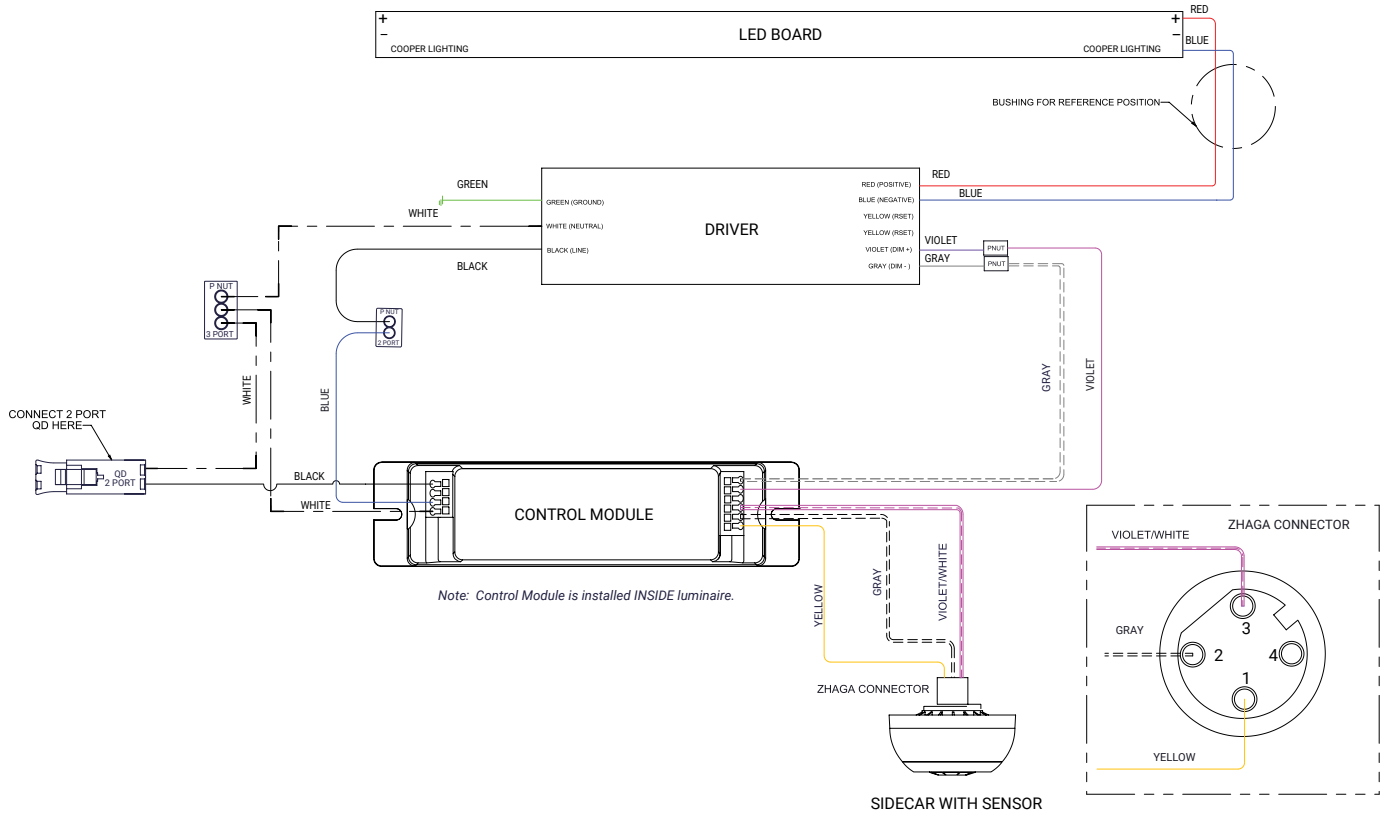
Dimensional Details - Control module



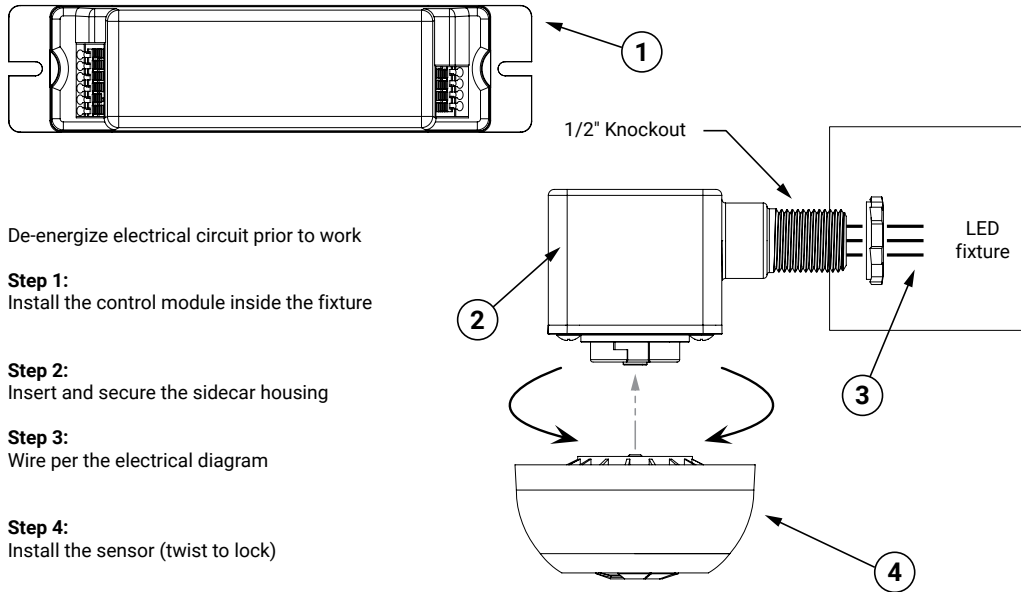
Dimensional Details - Optional Sidecar Extension



Wiring Diagrams



Fixture Installation



De-energize electrical circuit prior to work

Step 1:
Install the control module inside the fixture

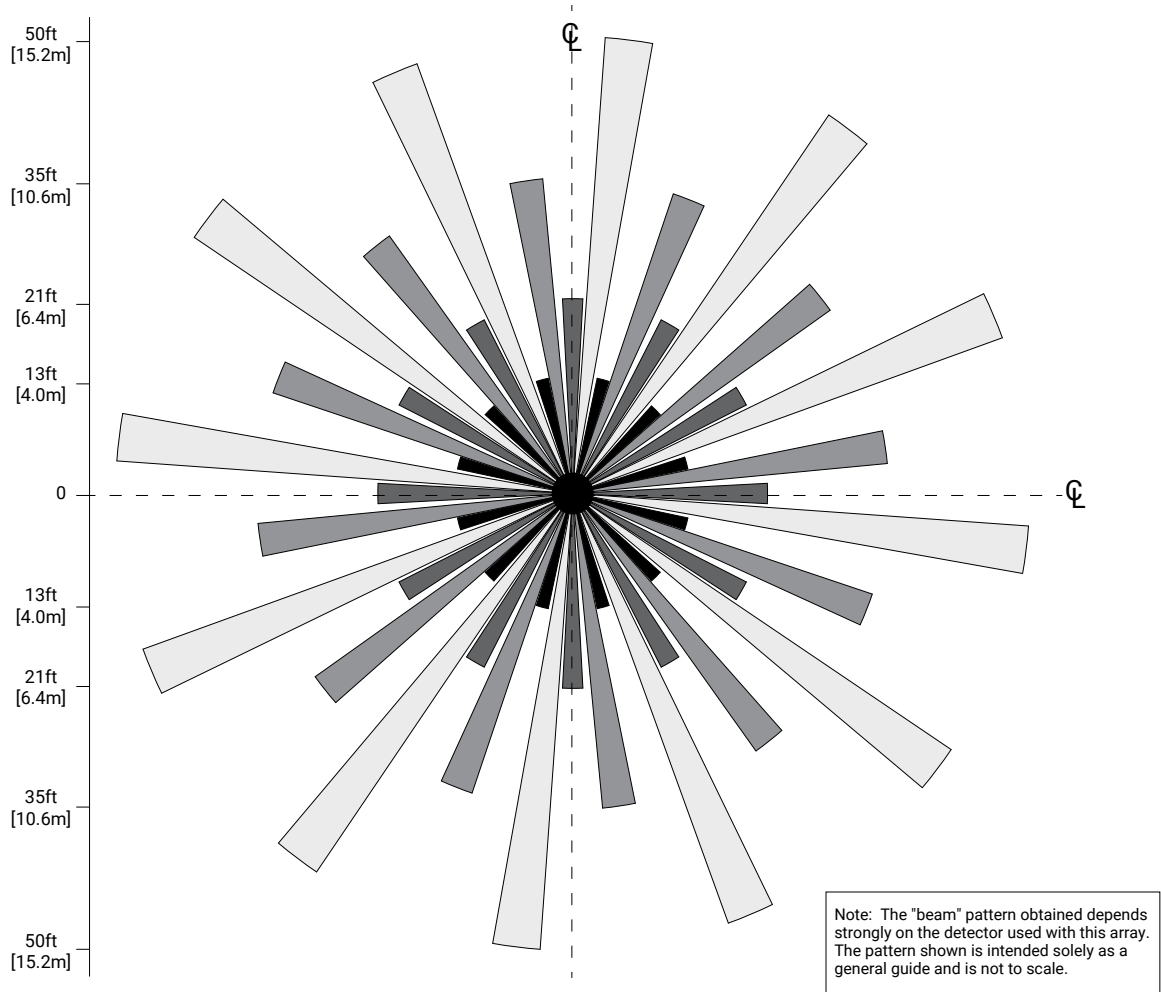
Step 2:
Insert and secure the sidecar housing

Step 3:
Wire per the electrical diagram

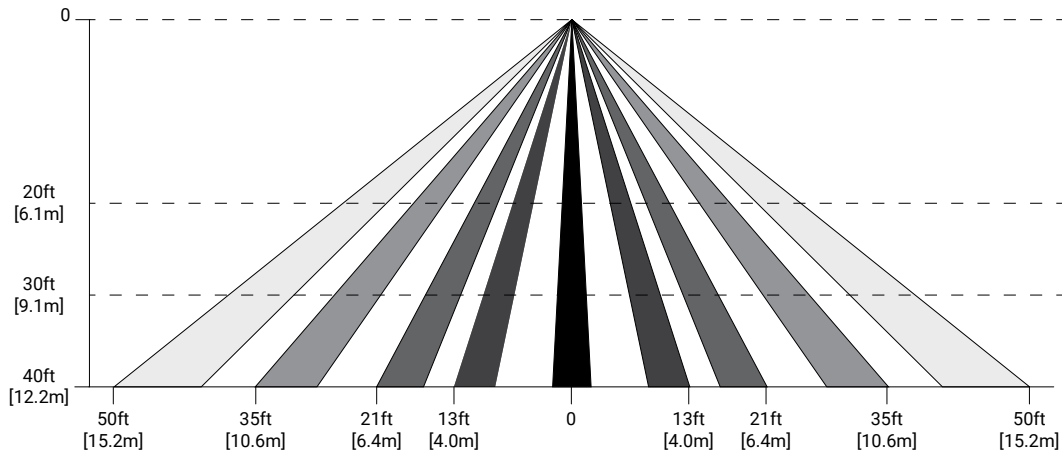
Step 4:
Install the sensor (twist to lock)

Field of View - High Bay

TOP VIEW:



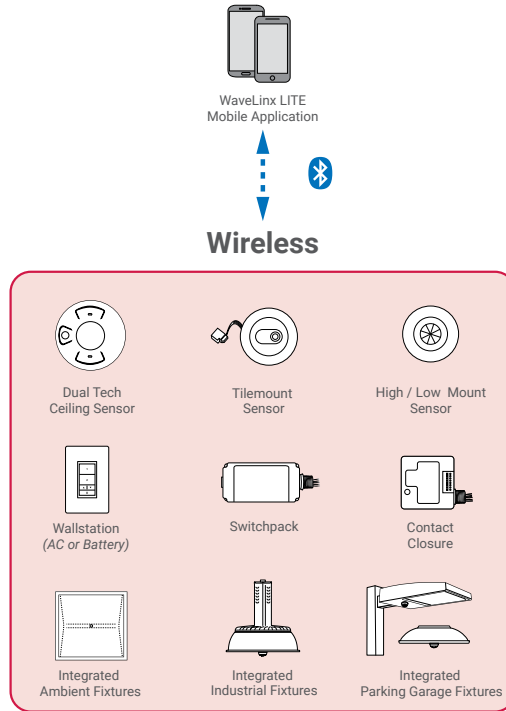
SIDE VIEW:




High mount models accommodate mounting height to 45ft (13.7m) for major motion (vehicles, fork trucks, etc.) - may not detect minor motion of people depending on conditions.

System Diagram:

This diagram shows the main components and topology of the WaveLinx system with LITE devices. The WaveLinx LITE devices use standardized IEEE 802.15.1 (Bluetooth® 4.2 Low Energy) mesh technology for device to device communications without the requirement of a gateway. The WaveLinx LITE enabled luminaires provide out-of-the-box functionality for independent operation when energized. With the use of the WaveLinx LITE mobile application with MyApps secure cloud portal access, groups of independent luminaires may be created and maintained with areas, control zones, and occupancy sets. WaveLinx LITE devices are not currently compatible with the WaveLinx Area Controller.



 **Control Systems**
• WaveLinx